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September 19, 2000

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
TW-A306
Washington, D.C. 20554

Re: IB Docket No. 95-91
Gen. Docket No. 90-357

Dear Ms. Salas:

As the Commission's records reflect, Aerospace and Flight Test Radio Coordinating Council ("AFTRCC") has filed comments in the above-referenced proceedings expressing concern about the possibility of interference from terrestrial DARS repeaters to flight test telemetry.

On September 11 of this year, counsel for XM Radio, Inc. ("XM"), Bruce D. Jacobs, filed a letter with the Commission containing a Coordination Agreement between XM and AFTRCC. That Agreement provides a mechanism for protecting aeronautical telemetry stations while at the same time facilitating installation of XM repeaters.

Previously, Sirius Satellite Radio, Inc. ("Sirius") had expressed the view that its repeaters would not cause interference to flight testing primarily on the grounds that they would not be located near areas of flight test operations (Sirius was of the view that flight testing is not conducted near any urban locations). As AFTRCC indicated in its Reply Comments filed March 8, 2000, a number of flight test centers are located in the vicinity of urban areas, e.g. St. Louis, Missouri, to take just one example. Moreover, other repeaters may cause interference due to their power levels and orientations. Thus, Sirius' proposed repeaters do give cause for concern. Given the safety of life issues inherent in flight testing, AFTRCC will accordingly urge Sirius to consider entering into a similar agreement with AFTRCC. AFTRCC will explore this matter with Sirius. In any event, however, AFTRCC would urge the Commission to apply the principles contained in the XM Agreement to resolving DARS repeater-flight test interference issues generally.

Any questions regarding this matter may be directed to the undersigned. An original and one copy of this letter are forwarded for inclusion in the Dockets of the above-referenced proceedings.

Sincerely,

William K. Keane
Counsel Aerospace and
Flight Test Radio Coordinating Council

cc: Ronald Repasi
Rosalee Chiara
Bruce D. Jacobs
Carl R. Frank

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Rosalee Chiara
Bruce D. Jacobs
Carl R. Frank

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September 11, 2000

Mr. Ronald Repasi
Federal Communications Commission
International Bureau
445 Twelfth Street, N.W.
Room 6-A505
Washington, D.C. 20554

Dear Mr. Repasi.

Attached is a copy of the Coordination Agreement between XM Radio and AFTRCC concerning the deployment of XM Radio's terrestrial repeaters. If there are any questions, please contact the undersigned or William K. Keane, Counsel for AFTRCC.

Very truly yours,

Bruce D. Jacobs

Attachment

cc: William K. Keane
Office of the Secretary - IB Docket 95-91

Document # 991314 v 1

Coordination Agreement between XM Radio and AFTRCC

1. AFTRCC will provide XM Radio the geographic locations of any aeronautical telemetry facility antennas that AFTRCC seeks to protect from out-of-band emissions by repeaters that XM Radio proposes to operate. AFTRCC will provide XM Radio with an initial list within 60 days of this agreement. (Such facilities are referred to as "Existing AFTRCC facilities.")

2. Within 60 days of this agreement, XM Radio will provide AFTRCC with a list of the metropolitan areas in which it intends to install its repeaters. Using the list of Existing AFTRCC Facilities, XM Radio will notify AFTRCC at least 30 days prior to the operation of any repeater to be located within line of sight of such a facility. Prior notification will include the repeater's geographic position, its antenna height relative to the aeronautical telemetry facility, and its calculated effective isotropic radiated power in the direction of the aeronautical telemetry facility.

3. XM Radio will limit the total out-of-band emissions of any repeater within line of sight of any Existing AFTRCC Facility so that, measured at any such facility in the 2360-2390 MHz band, the total such emissions from all XM Radio's repeaters will be less than -177 dB(W/m^2) per 4 kHz. XM Radio will provide AFTRCC documentation calculating the out-of-band emission level at the aeronautical telemetry location using line-of-sight calculations. To the extent necessary and with appropriate documentation using good engineering practice, XM Radio may also make reasonable adjustments to these calculations based on terrain blockage, directional antennas and other factors that may reduce the actual out-of-band emissions at the aeronautical telemetry facility's location. XM will provide AFTRCC with 30-day notice prior to initial operation of any repeater within line of sight, it being understood that good faith cooperation will govern resolution of any interference problems found to exist once a particular site or sites commences operation.

4. AFTRCC will notify XM Radio at least 60 days before installation and operation of any new or modified facilities that it seeks to protect. (Such new or modified facilities are referred to as "Proposed AFTRCC Facilities.") Within 30 days of receiving notice from AFTRCC of a Proposed AFTRCC Facility, XM Radio will provide AFTRCC documentation calculating the out-of-band emission level at the Proposed AFTRCC facility using line-of-sight calculations from any existing XM radio repeater. XM Radio will not be obligated to modify any of its existing repeaters in order to protect any Proposed AFTRCC Facility, except that after such facility is constructed and begins operations it shall be treated as an Existing AFTRCC Facility with respect to any repeaters XM Radio subsequently plans to deploy.

J.S. 9/11/00

5. Aeronautical telemetry facilities may need to add filtering to their equipment when the total in-band power flux density of the XM Radio repeater signals in the 2332.5-2345.0 MHz band exceeds approximately $-60dB(W/m^2)$ at the aeronautical telemetry facility, as computed using line-of-sight calculations. The operator of the aeronautical telemetry facility agrees to bear the costs of the additional filtering. If practical levels of filtering will not resolve interference problems, the parties will cooperate in good faith to achieve a satisfactory resolution.

6. This agreement shall be valid for a period of 15 years and can only be modified by mutual consent of the parties. It is binding on the parties and their successors and assigns.

7. Subject to unilateral change by either party as to its designated recipients, notice shall be provided to the following individuals:

in the case of XM Radio, to:

Jeff Snyder, Vice President, Systems
XM Radio Inc.
1500 Eckington Place, N.E.
Washington, DC 20002

with a copy to:

Lon Levin, Vice President
XM Radio Inc.
1500 Eckington Place, N.E.
Washington, DC 20002

in the case of AFTRCC, to:

Rex D. Miller
W. Clark Hart
Wayne L. Morris
Aerospace & Flight Test
Radio Coordinating Council
Post Office Box 200547
Cartersville, GA 30120-9010

Rex D. Miller

Date:

Jeff Snyder

Date: 9/11/00

5. Aeronautical telemetry facilities may need to add filtering to their equipment when the total in-band power flux density of the XM Radio repeater signals in the 2332.5-2345.0 MHz band exceeds approximately – 60dB(W/m^2) at the aeronautical telemetry facility, as computed using line-of-sight calculations. The operator of the aeronautical telemetry facility agrees to bear the costs of the additional filtering. If practical levels of filtering will not resolve interference problems, the parties will cooperate in good faith to achieve a satisfactory resolution.

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in the case of AFTRCC, to:

Rex D. Miller
W. Clark Hart
Wayne L. Morris
Aerospace & Flight Test
Radio Coordinating Council
Post Office Box 200547
Cartersville, GA 30120-9010

Rex D. Miller

Date: 9/8/00

Jeff Snyder

Date: